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A CRITICAL ANALYSIS OF STRATEGIC PERFORMANCE MEASUREMENT IN SUPPORTING ESTATE DECISIONS IN NHS SCOTLAND

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National Strategic Performance Measurement Systems (SPMSs) for Estates Management (EM) are becoming a more common tool among governmental agencies and the enforcement of their adoption to the different operational (regional or municipal) units. In theory, governments assume that Senior Estate Managers will use the information provided by the performance measures for strategic decision-making over the life cycle of the facilities; however, there is little evidence that in practice this is happening. To address a gap in the literature this study seeks to understand current practice in the use of strategic performance measures set nationally for Estate Management strategic decision-making at Senior Estate Managerial level. The research looks at the healthcare sector, taking the case study of NHS Scotland. Based on sixteen semi-structured interviews with Senior Estate Managers across different Scottish NHS Boards, the study found that the implementation of SPMSs has a symbolic power rather than instrumental. The lack of integration between Clinical Services and Estate Management and issues related to the design reduces the potential of SPMSs to be an effective instrumental tool.

Keywords: healthcare estate, strategic performance measurement systems

INTRODUCTION

Since the 1980s public organisations in many countries have been embarking on management reforms directed at improving efficiency, effectiveness and accountability. As a result of these reforms the power for policy making and service functions were separated, and issues of accountability and performance measurement (PM) became increasingly important.

In most countries, central governments' own or control a large amount of property and have the responsibility to provide real estate for public services within their respective jurisdictions. As governments and stakeholders have begun to view buildings as a strategic resource, an increasing demand has arisen from the governmental agencies reflecting different operational (regional or municipal) units to become more accountable and demonstrate that the capital is spent efficiently and effectively, and also for the planning, management and performance of their facilities to achieve best value. Thus, the

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last couple of decades have seen governmental agencies establish Strategic Performance Measurement Systems (SPMSs) for assessing performance of their property portfolios and in the majority of the cases it has been made mandatory for their adoption and reporting on the respective measures by their operational units. This is the case of the healthcare sector, where previous research showed that this practice has been adopted in the UK, New Zealand, the US and in some regions of Australia, driven by strong government direction and presenting commonalities on the attributes measured (Rodriguez-Labajos *et al*., 2016). The guidance documents published by different governments conclude that the purposes for the implementation of these systems are to show accountability and transparency, but ultimately to support decision making over the building life cycle (planning, investment/procurement, management-in-use and disposal phases) with a view of improving overall performance.

Recent studies have found that the use of performance information for different purposes at the same time (e.g. as managerial tool and as tool for the purpose of achieving accountability) is self-defeating, losing the effectiveness of the SPMSs (Bromberg, 2009; Gao, 2015). Scholars agreed that for the benefits of PM to be fulfilled in the public sector, the information resulting must be used for decision making (Cuganesan *et al*., 2014; Moynihan, 2005). However, in the public sector this practice has contemporarily a negative connotation within a neoliberal market context, as it is shown in earlier studies of the like of Carter *et al*., (1995) who stated that this practice was adopted by governments of many western countries promoted as a technology for the control of the public sectors; or Osborne and Ted (1992) who emphasised the importance of measuring through performance indicators as a means to ensure governmental control. More recently Le Galès (2016) argued that benchmarking comprehends instruments as technologies of government that associate knowledge and power. Drawing on the findings from the literature this research asks the question: 'Is performance information used in practice to inform decisions and integrated in a true strategic performance management system when applied nationally, or it is just a means to show accountability and legitimise power? And in this case, what are the consequences?

Measuring estate performance strategically presents methodological and practical complexity. Poor or not relevant designs for their users and their unsuccessful implementation have led this practice in non-profit organisations to become ‘a tick box exercise’, a well-documented issue in the literature that reduces the potential of PM to be maximised. LeRoux and Wright (2010) suggests that more focus should be on investigating and testing performance measurement practices in the public sector to identify how these systems can be designed and implemented to obtain the maximum benefits of the tool. These authors also indicate that how performance data is used in decision-making in the public sector is not well documented. This paper is a starting point for addressing this gap in the literature through examining current practice in the use of SPMS for EM in the healthcare sector, taking the case study of NHS Scotland.

Strategic Performance Measurement for Estates Management

In the literature and in practice it is often heard the well-known adage that says, “If you cannot measure it, you cannot improve it”. PM encompasses the processes of establishing goals, developing a metric set, and collecting, analysing and communicating performance information and results within the organisation and its key stakeholders (Brudan, 2010). This practice takes place at a number of different levels: strategic, tactical and operational. It starts at the strategic level and involves decisions at senior levels on appropriate investment and management of property assets to service delivery

requirements. It encompasses activities such as planning in the longer term and options such a new-build, modernisation, refurbishment or disposal of facilities (Støre-Valen *et al*., 2014). The tactical approach is derived from the strategies adopted, having an impact on the provision of space, services, costs and business risk. Then it runs to the operational level where the focus is on the ongoing management of the facilities over the short to medium term within the allocated budget set at the strategic level (Jones and White, 2008). In scientific management, performance is associated with both, PM and management. These two key processes follow to each other and cannot be separated from one another (Brudan, 2010). Støre-Valen *et al*., (2014) stated that to gauge the effectiveness of FM it is necessary to reach an understanding of the current conditions of the facility and thus make changes in current practices in order to achieve the desired performance. The authors concluded that it is necessary to develop assessment tools to be able to get a greater understanding of buildings as strategic means.

Data from the assessments is used to support portfolio-based facilities management and the strategic decision-making about investments in maintenance and repair (National Research Council, 2012). A number of studies in the property and asset management literature agree that ultimately performance data supports decision-making surrounding whether or not to make an investment and to assess the appropriateness of the facility towards organisation mission, facility expansion, real estate acquisition, facility's renovation and retrofit (Lavy *et al*., 2014). In a previous study Council *et al*., (2005) stated that performance measures inform decisions on the allocation of resources within an organisation and to make and justify future decisions. The costs associated with data collection, analysis and maintenance can be substantial (National Research Council, 2012); therefore, for measurement to be useful it must be effectively linked to other management and decision making processes. Without strong links the information generated is good to know but does not lead to improved decisions, get better performance or deliver more effective control and accountability (Wong, *et al*., 2015).

Research Aim

This research seeks to take healthcare as a case scenario to identify and outline current practice in the uses given to the performance information when SPMSs applied nationally, with a view to critically analyse the potential value of the tool. The research attempts to bring the theory into practice with the aim of improving the use of formal SPMSs.

RESEARCH METHODS

As pointed out earlier, there are a handful of key governmental agencies that have adopted performance measurement reporting systems. For this study, the healthcare sector was selected for different reasons: 1) it has been documented as the most difficult to manage in the public sector (Talib *et al*., 2013: 2) recent literature recommends the implementation of this practice at national level in healthcare (Støre-Valen *et al*., 2014; Hareide, *et al*., 2016: 3) the study is part of a wider project in collaboration with Health Facilities Scotland (HFS) that attempts to identify the potential value of SPMS for EM in the healthcare sector.

The NHS Scotland is taken as a case study and the main research strategy. Two methods for data collection are used to answer the research questions, including documentation analysis and interviews. LeRoux and Wright (2010) indicated in their study on how performance data is used in decision-making in the public sector the need for qualitative research based on interviews to fully understand how performance information is used.

Documentation analysis
Guidance documents produced by the Scottish Government, public and internal reports accessed via HFS, as well as information obtained through informal discussions with members of HFS were analysed to identify NHS current practice in the following process of PM: implementation of performance measures, data collection, communication and reporting.

Interviews
The interviews were conducted with one selected member from each of the 16 NHS Scottish Boards. Since the interviews focused on the overall Board' perspective in the use of the performance measures, each healthcare body was expected to provide only one response. Most of the representatives occupied Departmental Heads positions from different areas including capital, estates and finance, or similar roles responsible for the implementation of the Boards strategic plan at the operational level. They have dealt with the collection of data and reporting on the performance measures in their organisations since its implementation back to 2009 and participate in the elaboration of the annual Property Asset Management Strategy. For the purposes of this research and due to the large variety of role names, the interviewees are referred to as Senior Estate Managers. The interviews were conducted largely via videoconference due to the geographical distance and time constraints. However, where possible, they were conducted face-to-face allowing to directly observe behaviour and obtain more objective data.

The interviews consisted of open ended questions designed to last 20-30 minutes, mainly covering two areas: the value of collecting and reporting the performance data, and the uses given to the performance information resulting. Since the research was financed by the NHS, it was perceived that the participant's answers were in some occasions vague. In those cases the research evaluated the responders' attitudes and behaviours. Interviews were recorded and transcribed by the authors and analysed using thematic analysis with support of qualitative analysis software NVivo. The transcripts were initially coded line by line, followed by focused coding where the most significant and frequent codes were selected that made the most analytical sense when categorising the data into themes. Techniques like memo writing were also used for this research. The analysis of the data also includes comments that came across with the findings from previous interviews with the Policy Advisor and the Assistant Director (Property and Capital Planning) of HFS.

The context of SPMS in NHS Scotland
Health systems across the world have different governance systems. The NHS Scotland is characterised for being highly centralised and is financed from general taxation. The Scottish Government Health and Social Care Directorate is responsible for allocating capital investments but also for setting healthcare policy, providing strategic direction to the twenty-two healthcare bodies (named Boards) and overseeing delivery of services; while the healthcare Boards have more planning, managerial and operational functions. They are required by the Scottish Government to have appropriate governance, accountability and reporting arrangements in place to ensure the efficiency and effectiveness of the planning, operation, management and disposal of the facilities. In 2010, the Scottish Government adopted the National Asset and Facilities Services Performance Framework that consists of a combination of twenty outcome key performance measures, both financial and non-financial, as it has been emphasised by many authors (Franco-Santos, *et al*., 2012). The measures, also referred in this study as Key Performance Indicators (KPIs), reflect healthcare policy and organisational strategies. Prior to 2010, Boards used to have operational monitoring tools, but not many had strategic indicators in place with condition and suitability being the most common.

Since the 'Policy for Property and Asset Management in NHS Scotland' was implemented, Boards are required to record, monitor and report the operational performance of their estates on the 20 KPIs annually to the Government in order to compile the Annual State of NHS Scotland and Assets and Facilities Report (SAFR), a public document that provides a national perspective on the Board's assets and facilities management performances. To support this portfolio-based estate management, the Government adopted the Estate Asset Management System (EAMS) which is the national data collection for all properties from NHS Scotland. Data is recorded at block/department and site level for the following performance facets: physical condition, statutory compliance, environmental management, space utilisation, functional suitability, quality of the environment and the cost of the different levels of risk backlog maintenance. This data, together with finance related data that comes from the Cost Book, combine to support the development of the twenty Government wide performance measures (see table 1).

Table 1: Aspects looked at by the strategic performance measures adopted by the Scottish Government for the NHS

Property based measures (from EAMS)	Measures from Cost Book	Others
• Physical condition; • Statutory compliance status of property asset base; • Backlog maintenance expenditure requirement; • Significant and high risk backlog maintenance as percentage of total backlog expenditure requirement; • Estate functionality suitability; • Space utilisation; • Quality of physical environment; • Percentage of properties less than 50 years old	• Building area; • Property maintenance costs; • Facilities management costs; • Cleaning cost; • Energy cost; • Rates costs; • Catering costs; • Portering costs; • Laundry & linen cost; • Waste cost	• PAMS reflective of service needs and patient preferences; • Patient opinion of healthcare accommodation

In addition to the annual returns provided by the Boards on the 20 KPIs to the Government, they are also required to produce the biannually mandatory Property Asset Management Strategy that seeks to support the questions: "…where are we?...where do we need to be?...and how do we get there?" with an evidence base. Recent concerns have emerged relating to the extent to which performance measures are in practice used to support strategic decision-making; or who benefits from current SMPSs, other than Estate stakeholders, Governments or both?.

FINDINGS

Participants stated that they tend to use the performance data from the KPIs to justify funding requests and allocation to the Scottish Government as part of the business cases, and as a means to review performance annually with the Directors of Finance. This involves identifying either improvements or deteriorations of their estates that facilitates further interrogation and development of appropriate actions, understanding lack of investments and the effectiveness of the management strategies. To some extent performance information is also used to confirm their judgments, although not in all the cases, strongly linked to the size of their estates. Small healthcare bodies express concern about all the efforts put into -time and resources- for the limited perceived benefit which they obtain. Statements such as "the data collected merely supports what is already known" or "we are a small health Board and I know every building we have" arose continuously during the course of the interviews within this group. This is not surprising as the healthcare estates of small Boards comprise of less complex and fewer buildings. This allows having a more in-depth understanding of their estate with the ability to identify the problems without the need for undertaking facility performance assessments or the continuously recording and monitoring of data. This argument is also supported by a Senior Estate Manager from a large Board who mentioned how the usefulness of the

data collection varies according to the size of the Board. But to what extent has the information provided by the current set of performance measures for decision-making been integrated in a real management system? Interviewees stated that their use was limited, associated to: 1) the relevance of the measures; 2) the lack of resources and time to analyse the information, and 3) the reactive-secondary role that the estates performance information currently plays within the healthcare sector.

The relevance of the measures

The NHS Scotland performance measurement framework consists of a mix of efficiency measures, effectiveness measures and patient satisfaction. These three factors of building performance are defined by ISO 9241 (1998) as “usability”, a concept that denotes the effects on the user rather than the intentions of the building and its monitoring have been recommended by Støre-Valen *et al*., (2014). However, the interviews reveal that the performance information provided by the measures with most significant financial impact (i.e. related to soft FM, energy costs, etc.), which constitutes half of the reported measures, are neither used for decision making nor for the operational management of the facilities. The information provided is pitched at too high a level and that are not useful for operational matters, where more focused data is needed. These measures, together with patient satisfaction and some of the property based measures, such as quality of the environment, age of the building and, in a minority, the overall backlog maintenance cost, were perceived to not be useful for analysis purposes, seen by most of the interviewees as promoted by the Government and used merely for reporting performance to the Finance Directors, Chief Executives and Government.

The lack of resources

When the respondents were asked to what extent they manage their estates with a view to improving performance of the aspects looked at by the property based measures, the answer was: "only to a very limited extent". The majority of the respondents pointed out that lack of financial resources and time were the main barriers to moving forward performance improvement. A selection of interview responses is provided to help illustrate this point: "we just need to accept that we have got buildings that are not right, but there is not a fix, because there is no money", or "there is a little I can do without major investment in that building to improve functional suitability, so basically I only can acknowledge that there are requirements, and when the opportunity arises, then I would try to do something". A key comment reflected that in terms of priority, it is only after health and safety issues were addressed and resolved, that functional suitability and the space utilisation issues are considered.

Clinical is first

During the course of the interviews a question arose a few times concerning how this data is used by high level authorities (Governments, Chief Executives and the Director of Finance) in the decision making process; but also the lack of consideration given by the clinicians. In healthcare, strategic planning and management is conditioned by the clinical strategy. The statement "clinical is always first" came up often during the interviews. Estate and Facilities Departments need to adapt their management strategies to respond to the clinical requirements and often it supposes a challenge. In a few of the Boards, when high level strategic decisions are taken at an executive level, there is little or even no representation and involvement of the Estates Department and never enough reference to the facility performance information. Senior Estate Managers find that their KPIs are not given the same priority as clinical ones, citing difficulties in having estates issues raised at Board Level. A Senior Estate Manager stated: "the organisation does not look at the estates and facilities KPIs with the same going for the waiting time KPIs. We

struggle to get that information at the top table". Decisions which are made at high strategic level in many cases are not informed by the asset, or the suitability of the asset to accommodate the proposed change.

DISCUSSION AND CONCLUSIONS

The under-utilisation of performance information derived from the SPMSs with respect to strategic decision making, particularly from an operational and long term strategic planning perspective, calls into question the value of the current approach which has been described as "limited at best". Despite the Scottish Government's desires for performance information to add value to the decision making and thus lead to improvements in the way estates are managed, the reality appears to be different. Most of the measures, except for those related to health and safety issues (high risk backlog maintenance and statutory compliance) and in some instances functionality, are perceived by the interviewees as produced from a governance perspective for justification for funding and accountability purposes. Earlier, Halachmi (2004) pointed out that the agencies that produce the KPIs include performance information that is important to them and in many cases it is not what is needed for the external stakeholders who use the KPIs.

But what are the consequences of this? At first, those who are responsible for populating, updating and reporting the data may feel that they are overloaded with extra work and information that adds little value or benefit to their roles; therefore, increasing the likelihood of getting low quality data that may affect to the accuracy of the performance information which is relevant and also the quality of the returns demanded by the governments, reducing the effectiveness of measuring estates performance for the government purposes. In addition, there is the finance issue including the resource consuming and high costs associated with the data collection, maintenance and reporting, which could be allocated to solve other issues of higher priority. This was articulated mainly in the case of small boards which are facing a particular challenge in this regard.

Previous studies argued that the implementations of performance measurement systems are linked to both symbolic and instrumental benefits (Modell, 2004; Moynihan, 2005). Taylor (2007) pointed out that the symbolic benefits are the core strength of performance measurement as it helps to promote the Government’s image of objectiveness and rationality and as a means to show their effectiveness and efficiency (Moynihan, 2005). By contrast, as stated earlier, the greatest potential of PM is as a tool for supporting decisions, otherwise the overall benefits may not overcome the negative potential. The findings reveal that current practice in the use of the tool in the NHS Scotland is mainly a symbolic character, with the instrumental potential not being fully exploited. In the NHS, as well as in other public organisations that are publicly financed, the issue of accountability and transparency becomes a key element and the symbolic benefits provided are of huge importance. Nevertheless, the instrumental potential of measuring performance is not diminished by the organisation; as it was also produced with the purpose of supporting decisions with a view to improve the way their estates are managed aligned to the organisation's goals and strategies.

This research has identified several themes of why the instrumental element is not fully realised related to the design and implementation of the systems and also the influence of the clinical services.

Design

The types of measures adopted by the Government are all outcome based and long-term performance measures. These are more meaningful for reporting purposes and the

delivery of long term-high level strategies; and also for the Government to gain a better knowledge about how well the estates are managed by the Boards and the attributed power to decide prioritisation for funding but also to point out underperformed estate portfolios. However, the information resulting from these measures are non-meaningful at the operational delivery, where other types of measures/information short term related may be more relevant, such as process measures that provide information that is actionable (e.g. what is being done well and what needs improvement) (Mant, 2001).

Another aspect is the type of data drawn on to construct the measures, which affect their potential for impacting the decision making. For example, patient satisfaction, one of the core KPIs of many organisations in the public and private sector and recommended by Lavy *et al*., (2014). Patients are an integral part of the services provision with high impact on the way services are delivered. At the moment this measure is very ad-hoc as the current surveys for patient satisfaction struggle to pick up the estate related aspects and there is not a comprehensive-systematic approach to its application. As Patwardhan and Spencer (2012) stated, patient surveys used merely for falsely publicised positive results supposes a lost opportunity for improvement. Well-designed surveys incorporate the voice of the patient into strategic decisions, an essential element of the meaning of "patient centre" but also it can help streamline processes and save costs (LaVela and Gallan, 2014).

Implementation

Large importance has been given by scholars to the importance of having the right measures in place, but communication cannot be dismissed. 'When, to who and how' performance data is communicated may improve the potential use of the performance information and to achieve better EM outcomes. At the moment, the use of performance information is limited to Government officers, Senior Estate Managers and in a minority, to the Directors of Finance (or similar); being reported annually, and lacking or having minimal influence in the formulation of the clinical strategy and therefore reacting to this. Adopting a more proactive communicative approach and including clinicians as users of the information may improve the extent at which information is used for strategic decisions; a practice that is already happening in NHS Fife.

Clinical services

In healthcare, different from other public sectors, the clinical services are the primary focus in the organisation. Estates and facilities are left as secondary, lacking the recognition they deserve, and therefore reducing the potential of realising the instrumental element of SPM for EM. In other words, Estates Managers need to react to the clinical priorities, limiting their ability to manage their estates effectively but still leaving them with the responsibility for deciding the operational plan for moving forward. In addition, 'clinical services' are the main drivers for the allocation of resources, restricting the capital directed to improve the estate performance.

Investments at more operational levels are primarily aimed at dealing with health and safety issues, rather than being allocated to improving other aspects of the facilities which could potentially bring large benefits to the overall organisation performance, such as space utilisation and quality of the environment. Accordingly with these findings, it can be asserted that the level of investment allocated to the estate and the reactive-secondary role that the estate plays in the organisation, influences in part the extent at which performance information is used for management purposes. Does this mean that in healthcare the instrumental benefits of SPMS cannot be realised? Well, although clinical is highly influential in the healthcare sector, the potential of current practice may be

further enhanced and increase the significant tangible gains in EM as long as the organisation promotes the use of estates performance information across the different users including clinicians, being more proactive rather than reactive, as well as improving the design of the systems making it more relevant to the users.

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